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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/284,578 | 10/08/1999 | AKIKO MIYA | 325/E6627 | 2522 |

7590 05/05/2004

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EXAMINER

WEBMAN, EDWARD J

| ART UNIT | PAPER NUMBER |
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1617

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



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| APPLICATION NUMBER | FILING DATE | FIRST NAMED APPLICANT | ATTY. DOCKET NO. |
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EXAMINER

ART UNIT

PAPER NUMBER

4/4/02

DATE MAILED:

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

☒ Responsive to communication(s) filed on 12/24/03☐ This action is **FINAL**.☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 1-9, 11, 24, 26, 30, 31 is/are pending in the application.
Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-9, 11, 24, 26, 30, 31 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) _____
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☐ Notice of Reference Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

--SEE OFFICE ACTION ON THE FOLLOWING PAGES--

Art Unit: 1617

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 11, 24, 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Guire.

Guire teaches a solid surface modified with a linker covalently bound to the surface by photo activation of one linking group, the other linking group being bound to a biocompatible agent (abstract). Antibiotics are specified (column 6, line 16), including penicillin (claim 6). A linker comprising polyoxyethylene is disclosed (column 6, line 26). A linkage of a carboxyl group to nitrogen or oxygen is specified (column 7, lines 36-39). Polyolefins are specified as a substrate (column 4, line 33).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 11, 24, 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Patnaik et al '165.

Patnaik et al '165 teach a PTFE backbone bound to a polymeric spacer with amine terminal bonds which is in turn bound to a bioactive molecule (abstract, column 4

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lines 54-59). An amide bond is specified column 5 lines 1-5). Antibiotics are specified (column 6, line 29). Polymeric spacers are disclosed (column 5 lines 54-59).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guire as applied to claims 1-7, 11, 24, 26 above, and further in view of notice under MPEP 2144.03.

Guire is discussed above.

The examiner takes notice under MPEP 2144.03 that both tetracycline and benanomicin contain hydroxyl groups.

It would have been obvious to one of ordinary skill to attach tetracycline or benanomicin to the polymer of Guire in view of the fact that they both contain hydroxyl groups, which can be reacted with the NOS of Guire.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patnaik et al '165.

Patnaik et al '165 is discussed above.

The examiner takes notice under MPEP 2144.03 that penicillin, Lymecycline and benanomicin contain a carboxylic acid group. It would have been obvious to one of ordinary skill to attach penicillin, lymecycline, or benanomicin to the polymer of Patnaik et al, '165 in view of the fact that they contain a carboxylic acid group which can be reacted with the amine terminated spacer of Patnaik et al '165.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 11, 30, 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Sugo.

Sugo teach graft polymerization of a monomer to a polyolefin base and introducing an antimicrobial group to the grafted chain (abstract). Graft polymerization with a gas of a reactive monomer is specified (column 3 lines 24-29). Further reaction with amino acids is disclosed to form an antimicrobial group (column 3 lines 32-48).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 9, 11, 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Goldberg et al.

Goldberg et al teach a surface graft-polymerized with a monomer wherein a biofunctional agent is chemically bonded (Abstract). Substrates include polyolefins (column 15 line 1). Penicillin and tetracycline are disclosed (column 17 lines 56, 57). As to the claimed process, process steps are not considered patentable during prosecution of product-by-process claims before the PTO.

No claims allowed.

Any inquiry concerning this communication should be directed to Edward J. Webman at telephone number 571-272-0633.

Webman/tgd

April 6, 2004


